Solving Quadratic Equations (A)

Name:_____ Date:_____

Solve each equation for x.

1. $-x^2 + 6x + 7 = 0$

2. $-x^2 + 2x + 35 = 0$

3. $x^2 + 13x + 36 = 0$

4. $x^2 - x - 12 = 0$

5. $-x^2 - 2x + 48 = 0$

6. $x^2 - 3x - 40 = 0$

7. $-x^2 + 5x + 6 = 0$

8. $-x^2 + x + 2 = 0$

9. $x^2 + 2x - 8 = 0$

10. $-x^2 + 7x - 6 = 0$

11. $-x^2 - 15x - 54 = 0$

12. $x^2 + 6x + 9 = 0$

13. $-x^2 + 5x + 36 = 0$

14. $x^2 - 2x - 63 = 0$

15. $x^2 - 36 = 0$

16. $x^2 + 10x + 25 = 0$

17. $x^2 - x - 6 = 0$

18. $-x^2 + 81 = 0$

19. $x^2 + 3x - 40 = 0$

20. $x^2 + 6x - 27 = 0$

Solving Quadratic Equations (A) Answers

Name: _____

Date: _____

Solve each equation for x.

1. $-x^2 + 6x + 7 = 0$
   $-(x - 7)(x + 1) = 0$
   $x = 7, -1$

2. $-x^2 + 2x + 35 = 0$
   $-(x - 7)(x + 5) = 0$
   $x = 7, -5$

3. $x^2 + 13x + 36 = 0$
   $(x + 4)(x + 9) = 0$
   $x = -4, -9$

4. $x^2 - x - 12 = 0$
   $(x + 3)(x - 4) = 0$
   $x = -3, 4$

5. $-x^2 - 2x + 48 = 0$
   $-(x + 8)(x - 6) = 0$
   $x = -8, 6$

6. $x^2 - 3x - 40 = 0$
   $(x - 8)(x + 5) = 0$
   $x = 8, -5$

7. $-x^2 + 5x + 6 = 0$
   $-(x - 6)(x + 1) = 0$
   $x = 6, -1$

8. $-x^2 + x + 2 = 0$
   $-(x - 2)(x + 1) = 0$
   $x = 2, -1$

9. $x^2 + 2x - 8 = 0$
   $(x - 2)(x + 4) = 0$
   $x = 2, -4$

10. $-x^2 + 7x - 6 = 0$
    $-(x - 1)(x - 6) = 0$
    $x = 1, 6$

11. $-x^2 - 15x - 54 = 0$
    $-(x + 6)(x + 9) = 0$
    $x = -6, -9$

12. $x^2 + 6x + 9 = 0$
    $(x + 3)(x + 3) = (x + 3)^2 = 0$
    $x = -3$

13. $-x^2 + 5x + 36 = 0$
    $-(x + 4)(x - 9) = 0$
    $x = -4, 9$

14. $x^2 - 2x - 63 = 0$
    $(x + 7)(x - 9) = 0$
    $x = -7, 9$

15. $x^2 - 36 = 0$
    $(x - 6)(x + 6) = 0$
    $x = 6, -6$

16. $x^2 + 10x + 25 = 0$
    $(x + 5)(x + 5) = (x + 5)^2 = 0$
    $x = -5$

17. $x^2 - x - 6 = 0$
    $(x + 2)(x - 3) = 0$
    $x = -2, 3$

18. $-x^2 + 81 = 0$
    $-(x + 9)(x - 9) = 0$
    $x = -9, 9$

19. $x^2 + 3x - 40 = 0$
    $(x + 8)(x - 5) = 0$
    $x = -8, 5$

20. $x^2 + 6x - 27 = 0$
    $(x - 3)(x + 9) = 0$
    $x = 3, -9$